R E M A R K S

Careful review and examination of the subject application are noted and appreciated.

SUPPORT FOR THE SPECIFICATION AMENDMENTS

Support for the specification amendments can be found in the specification, for example, on page 23 lines 16-21, FIG. 6 and claim 1, as originally filed. Thus, no new matter has been added.

SUPPORT FOR THE CLAIM AMENDMENTS

Support for the claim amendments can be found in the specification, for example, on page 23 lines 9-13, page 23 lines 16-21, page 24 lines 1-21, page 25 lines 1-13, page 31 lines 10-20, page 33 lines 9-20 and FIGS. 5-8, as originally filed. Thus, no new matter has been added.

IN THE DRAWINGS

Applicant's representative respectfully traverses the requirement to label FIGS. 1-2 as prior art. No admission has been made regarding FIGS. 1-2 as prior art and the requirement should be withdrawn. After the Examiner withdraws the rejection over the background section, Applicant's representative will label the drawings "conventional".

OBJECTIONS TO THE SPECIFICATION

The objection to the specification for the Attorney docket numbers on page 1 was obviated by the Preliminary Amendment filed October 27, 2000.

The objection to the specification for the brief description of FIG. 8 referencing itself on page 20, line 1 has been obviated by appropriate amendment.

The objection to the abstract for using the word "comprising" has been obviated by appropriate amendment. As such, the objections to the specification should be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. §101

While Applicant's representative does not necessarily agree with the rejection of claims 1-15 and 19-20 under 35 U.S.C. §101 as being non-statutory subject matter, the claims have been amended in the interest of advancing the prosecution. As such, the rejection to the claims should be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. §112

The rejection of claim 20 under 35 U.S.C. §112, second paragraph, has been obviated by cancellation and should be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. §102

The rejection of claims 1-4, 11 and 13-18 under 35 U.S.C. §102(e) as being anticipated by Heuer '660 has been obviated by appropriate amendment and should be withdrawn.

Heuer concerns a method for transmitting data packets and network element for carrying out the method (Title). In contrast, the present invention concerns an apparatus generally comprising an interface connectable to a network. The interface may be configured to transmit information via a frame in the network. The frame generally comprises a packet envelope carrying a plurality of packets. A first of the packets may have one or more labels configured to control routing of the first packet through the network and a payload to carry the information. Heuer does not appear to disclose or suggest every element as arranged in the claims. As such, the claimed invention is fully patentable over Heuer and the rejection should be withdrawn.

Claim 1 provides a first packet having one or more labels configured to control routing of the first packet through a network. Despite the assertion on page 4, item 11, line 5 of the Office Action, the IP overhead (OH) in FIG. 10 of Heuer does not appear to be a label for routing an IP-Packet through an SDH network. A conventional definition for IP overhead generally includes a protocol version number, an Internet header length, a type of service, a total length, a fragment identification, flags,

a fragment offset, time to live, protocol, header checksum, source address, destination address and padding (See Attachment A, *Encyclopedia of Networking*, Osborn/McGraw-Hill, Berkley, California 1998), none of which appear to be a label. Therefore, Heuer does not appear to disclose or suggest a first packet having one or more labels configured to control routing of the first packet through a network as presently claimed. Claims 16 and 17 provide language similar to claim 1. As such, the claimed invention is fully patentable over the cited reference and the rejection should be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

The rejection of claims 5-10, 12 and 19-20 under 35 U.S.C. §103(a) as being unpatentable over Heuer in view of the Background section of the present application is respectfully traversed and should be withdrawn.

Claim 7 provides that at least one of the packets comprises a Simple Data Link (SDL) packet. In contrast, Heuer and the Background section of the present application appear to be silent regarding SDL packets. Therefore, Heuer and the Background section, alone or in combination, do not appear to teach or suggest at least one packet comprising a Simple Data Link packet as presently claimed. As such, claim 7 is fully patentable over the cited references and the rejection should be withdrawn.

Claim 8 provides a link layer address following the labels. In contrast, Table I from the Background section of the present application shows the link layer address before the MPLS labels. Therefore, Heuer and the Background section, alone or in combination, do not appear to teach or suggest a link layer address following labels as presently claimed. As such, claim 8 is fully patentable over the cited references and the rejection should be withdrawn.

The Office Action fails to present evidence of motivation to combine Heuer with the Background section of the present application. Motivation comes from the references or in the knowledge generally available to one of ordinary skill in the art (MPEP §2142). However, the Office Action does not provide any evidence of the sources for the asserted motivations. The Office Action appears to be using the claims as templates for the proposed combinations making the asserted motivations merely conclusory statements. Therefore, the Office Action has failed to establish *prima facie* obviousness for lack of motivation to combine. As such, the rejection should be withdrawn.

Furthermore, Applicant's representative has not performed an analysis on the sentences in the Background section of the present application referenced in the Office Action to determine if the referenced sentences qualify as prior art under 35 U.S.C. §102/103. No express admission of prior art was made in the

application as filed. No evidence has been provided in the Office Action to indicate that the referenced sentences are prior art. As such, the proposed combination of Heuer and the Background section appears to be improper.

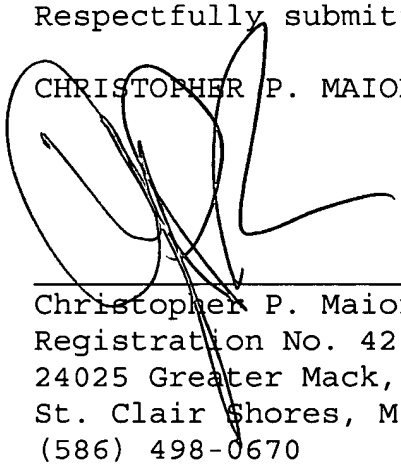
Accordingly, the present application is in condition for allowance. Early and favorable action by the Examiner is respectfully solicited.

The Examiner is respectfully invited to call the Applicant's representative should it be deemed beneficial to further advance prosecution of the application.

If any additional fees are due, please charge our office Account No. 50-0541.

Respectfully submitted,

CHRISTOPHER P. MAIORANA, P.C.



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Dated: October 14, 2003

Docket No.: 0325.00345

Attachment A

Class B address	128.10.50.25	10000000 00001010 00110010 00011001
Class B subnet mask	255.255.0.0	11111111 11111111 00000000 00000000

As mentioned previously, class C addresses restrict the number of hosts per network to 254. To get around this problem, a *subnetting* scheme was devised that basically divides the host portion of the address into two parts and uses some of the bits to identify subnetworks within your own network. However, there is a trade-off in doing this. If you use some of the bits in the host address to identify a subnet, then you reduce the number of bits that are available for host addressing. This is outlined in the following table. For example, if you split your network into two subnets, you can have 126 hosts per subnet. With 16 subnets, only 14 hosts are possible per subnet.

Subnet Mask	Binary Value of Last Byte	Number of Subnetworks Allowed	Number of Hosts per Subnet
255.255.255.128	x.x.x.10000000	2	126
255.255.255.192	x.x.x.11000000	4	62
255.255.255.224	x.x.x.11100000	8	30
255.255.255.240	x.x.x.11110000	16	14

For the technically inclined, note how the last byte in the subnet mask adds binary 1s to the mask in the second column. In the first case, decimal 128 adds binary 1 to the last byte of the mask. This single bit is the subnet address space, but only two values are possible—binary 0 and 1, so only two subnets are allowed. In the second case, decimal 192 adds two binary 1s to the last byte of the mask. With two bits, four subnets are possible—00, 01, 10, 11.

Alert readers might notice that the number of possible hosts is shy by two. This is because the first and last binary values are used for broadcasting and internal use.

IP Datagram

The IP datagram header, pictured in Figure I-15, is the envelope in which data is transmitted. It is sometimes referred to as a packet, in general discussions. The datagram fields are described in the following list. Note that the maximum length of the datagram including header and data cannot exceed 65,535 bytes.

- **Version** The version number of the protocol.
- **IHL (Internet header length)** Length of the header.
- **Type of service** The various levels of speed and/or reliability.
- **Total length** The total length of the datagram.
- **Identification** If a datagram is fragmented, a value that identifies a fragment as belonging to a particular datagram.

Attachment A

- **Flags** DF (Don't Fragment) or MF (More Fragments). An indication of whether or not this is not the last fragment.
- **Fragment offset** Where the datagram fragment belongs in the set of fragments.
- **Time to live** A counter that is decremented with every pass through a router. When 0, the datagram is discarded.
- **Protocol** The transport layer process to receive the datagram.
- **Header checksum** Error correction for the header.
- **Source address** The IP address of the host sending the datagram.
- **Destination address** The IP address of the host to receive the datagram.
- **Options/padding** Optional information and filler to ensure the header is a multiple of 32 bits.
- **Data** The user data (a variable field, not shown in the figure).

IPv6 (Internet Protocol version 6)

IPv4 has served the Internet community well, but it has limited address space and is causing major problems as more and more hosts connect to the Internet. A solution was developed with the creation of CIDR (Classless Interdomain Routing), which

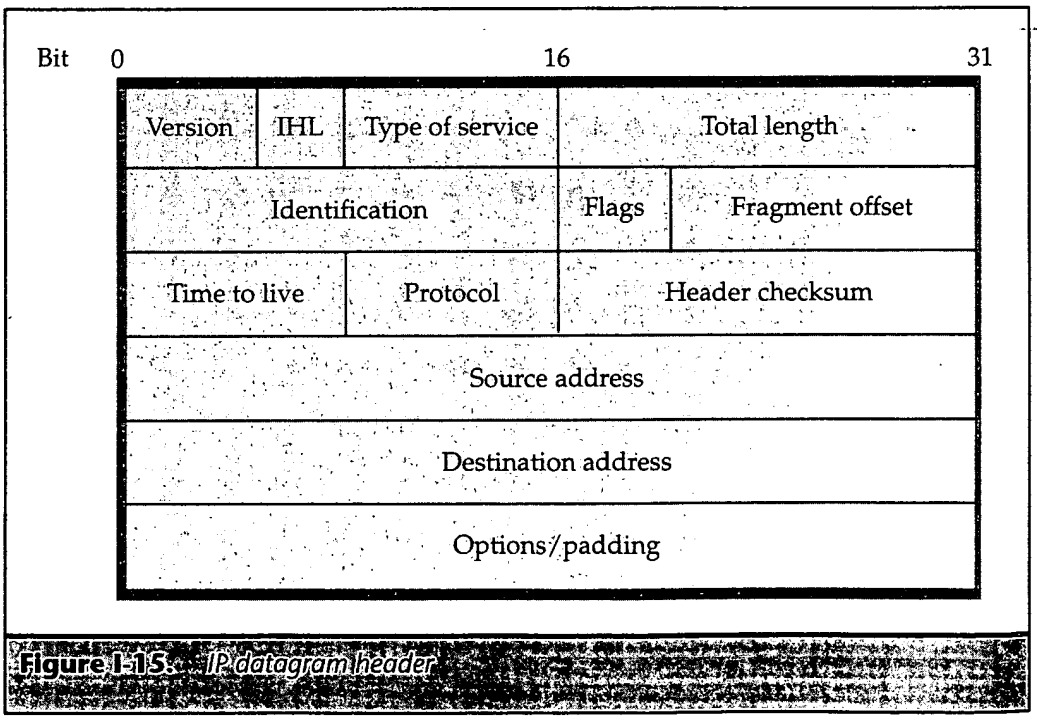

Figure I-15: *IP datagram header*

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Concepts; Data
Framing in Dat
Mobile IP; Pack
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IETF (Internet
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A-2